

## **IN THE SPECIFICATION:**

Please amend the specification as follows:

Please replace the paragraphs beginning at page 1, line 4 through page 1, line 20 with the following rewritten paragraphs.

### **Field of the Invention**

The invention refers to a device for storing goods, in particular vehicles, the goods being stored on at least one platform and the platform being guided traversable on guides over a traverse path, means being provided for traverse and the platform being secured against undesired movement by means of a co-operation of safety means arranged at the guide and platform.

### **Background of the Invention**

Devices for storing goods, in particular vehicles, are known as so-called car parking systems.

These systems are ~~characterised~~ characterized by a movable, vertically shifting platform where the vehicle is parked. By means of a lifting cylinder for example the platform is lifted. For that the platform is guided in lateral guides.

Please replace the paragraph beginning at page 5, line 9 through page 5, line 32 with the following rewritten paragraph.

In order to solve this problem the invention proposes a device for storing goods, in particular vehicles, where the goods can be stored on at least one platform and the platform is guided on guides over a traverse path, means being provided for traverse and the platform being secured against undesired movement by means of a co-operation of safety means arranged on the guide and the platform, which is ~~characterised~~ characterized in that the locking unit is rotatable and supported in such a way that the center of gravity of the locking unit is located off-center so that the locking unit is in continuous active connection with the locking element as long as no power acting against the gravity is brought into the locking unit. Now such an arrangement allows providing the device for storing goods with a safety device which is permanently in active connection and has only to be opened when the platform of the device should be moved. In particular, lowering is only possible when the locking unit is released by a force acting against the gravity into the locking unit. By means of that now a device is created which guarantees a safety acting independently from the means of traverse, respectively lifting or lowering, of the platform. An additional arrangement of technical means like springs, magnets, cylinders or the like is not necessary anymore for the securing of the platform according to the present solution.

Please replace the paragraphs beginning at page 7, line 12 through page 8, line 15 with the following rewritten paragraphs.

An advantageous development of the device according to the invention provides that the safety means can be brought over the complete traverse path of the platform against the guide on any point into active connection in order to interrupt the movement of the platform. In the sense of

the invention “on any point” is understood when the platforms can only be determined in discrete steps, for example because of the tothing of a gear rack and the like. In the same way, however, also a securing can be achieved on any point, for example by a magnetic clutch or the like, which allows a continuous positioning, respectively determination, along the traverse path.

In an advantageous development the invention proposes that safety means are provided by a locking unit and a locking element. These locking units, respectively elements, may have different embodiments. Therefore it is, for example, possible to form the locking unit as a notch, a bolt, a wedge or a magnetic element. Conveniently the locking element can be formed as gear rack, as chain, as perforated plate, as magnetic metal strip or the like. Concrete embodiments of these elements will be described furthermore in the following passages.

An advantageous development of the device is ~~characterised~~ characterized by an arrangement of the locking unit on the platform and of the locking element on at least one of the guides. Of course the principle can be ~~realised~~ realized vice versa, so that in another convenient embodiment the locking element is arranged on at least one of the guides. According to the chosen design it is therefore possible to keep the effort for the installation technique as low as possible. If, for example, the locking unit is arranged on the platform, it may be necessary to lead certain cables or mechanic actuating elements on this platform which might enlarge the effort. If the reversed principle of the arrangement of the locking element on the platform is chosen and the locking unit is arranged on at least one of the guides, for example, the effort with the movable cable, respectively actuating device, could be avoided.

Please replace the paragraph beginning at page 9, line 5 through page 9, line 19 with the following rewritten paragraph.

Of course it is, according to the invention, also provided that the locking unit is supported rotatably in such a way that the center of gravity is located, as already described, off-center. However, the center of gravity may be chosen here in such a way that the locking unit is not in continuous active connection if a force acting against the centrifugal force is brought into the locking unit. The force can be brought into the locking unit by a deflected cable, as described above. In the same way it is possible to provide a spring, a cylinder or the like, which exercise permanent power on the locking unit as long as the platform has to be fixed. Only when the platform shall be moved a power is exercised on the locking unit in order to bring the locking unit out of the active connection with the locking element. By means of that the principle of the kinematic reversal is ~~realised~~ realized.

Please replace the paragraph beginning at page 10, line 1 through page 10, line 12 with the following rewritten paragraph.

A particularly advantageous development of the invention is ~~characterised~~ characterized by the fact that the locking unit can be rotated and is supported in such a way that the center is located off-center so that the locking unit is in continuous active connection with the locking element as long as no power acting against the gravity is brought into the locking unit. Thus a passive safety design is created in such a way that through the arrangement of the notch (weight and orientation

around the rotational axis) it is achieved that the notch locks only in the not-impinged case, therefore is independently (passive) safe. By means of that in a simple way a dead man's circuit is ~~realised~~ realized.

Please replace the paragraphs beginning at page 11, line 17 through page 12, line 7 with the following rewritten paragraphs.

The device according to the invention is also ~~characterised~~ characterized by the fact that the cable is attached to the upper end of at least one of the guides, preferably the upper end of a stationary column, and to the lower end of at least one guide or to the floor.

According to a particular embodiment of the invention it is provided that the rotatably supported locking unit is arranged on the platform and the locking element preferably designed as gear rack is arranged on the frame of the device, preferably on the stationary column. Here at least two deflection rollers are provided on the locking unit, over which the cable is guided which is attached to the upper end of the device and connected with the opening element arranged on the floor or on the lower end of the device, which effects a movement, in particular a pulling movement, on the cable when the opening element is actuated, introducing a power acting against the gravity into the locking unit, which rotates the locking unit in such a way that it disengages from the locking element. The design of the invention presented here can be ~~realised~~ realized comparatively easy and is mechanically very reliable. The arrangement here is chosen in such a way that it works on each point of the platform along the traverse path in a simple way.

No cables or other parts have to be taken with which have to be connected to changeably active lengths of connecting lines correspondingly which would mean additional effort.

Please replace the paragraphs beginning at page 13, line 20 through page 14, line 26 with the following rewritten paragraphs.

A development of the device according to the invention is ~~characterised~~ characterized by the fact that the locking unit releases the platform only when the actuating element is actuated. This is an additional safety to the passive safety already in operation.

According to the invention it has also been found to be an advantage if in the case where the device is located inside a building, the cable or the cables are attached to the corner, respectively wall, of the building. This refers to the upper ends of the cables. The lower ends of the cables are attached, as already described before, either to the guides, respectively to the floor of the building.

The invention is, according to an advantageous development, also ~~characterised~~ characterized by the fact that the cable, respectively the chain, the gear rack and the locking unit are protected against unintentional intervention by a cover which can be removed, if desired. Thus another aspect of the accident protection is taken into consideration, besides the cover also serves for protection of the cable pull and the other safety means so that they will work reliably.

Of course, the cables may also be attached to a frame where the device is arranged. Namely, the devices for storing goods are not only put up inside buildings, but also outside as devices formed in metal frames. However, it is also possible to provide the devices with a frame and to arrange them in large buildings, for example in halls. In this case it is provided that the cables are attached directly to the frame.

Another aspect of the invention is ~~characterised~~ characterized by the fact that the locking unit is represented by a centrifugal brake. This centrifugal brake will lock the platform against the guide every time when the platform has a movement speed which deviates from the usual speed of movement of the platform. The centrifugal brake will then be operated automatically. The usual speed of the platform is set on this centrifugal brake. When the platform exceeds this usual, given speed the centrifugal brake comes into action. Other embodiments are possible here as those which are used for example in passenger elevators, lifts and the like.

Please replace the paragraphs beginning at page 15, line 1 through page 15, line 33 with the following rewritten paragraphs.

#### Brief Description of the Different Views of the Drawings

The invention is described in the following more detailed in embodiments and figures. The figures show:

Fig. 1 the side view of an embodiment of the invention;

Fig. 2 and 3 detail sections of Fig. 1; and

Fig. 4 the embodiment of a locking unit.

#### Detailed Description of the Preferred Embodiments

Fig. 1 shows in a side view a device for storing goods, in particular a car parking system, the platform 1 being arranged on a guide 2 designed as a column. A hydraulic cylinder 11 serves for adjusting the height of the platform 1. On the platform 1 a locking unit 3 is arranged which is ~~characterised~~ characterized in this particular embodiment by the fact that it is arranged rotatably on the platform 1, the center of gravity being off-center, so that the locking unit 3 comes already just by means of ~~the~~ gravity into the position where the locking unit 3 is in active connection with the locking element 6 which is a gear rack in this illustration. The locking unit 3 designed as a notch has two deflection rollers over which a cable 5 is guided in the form of an "S". The cable 5 is, on the one hand, attached to the guide 2 designed as a column and, on the other hand, to the floor. On the floor an opening element 7 is arranged. This opening element 7 is designed in such a way that it leads to a change of position of the cable 5 when the element is actuated.



Please replace the paragraph beginning at page 16, line 7 through page 16, line 33 with the following rewritten paragraph.

In the illustration according to Fig. 1 the principle of the invention can be understood very easily. However, this is only one possible embodiment of the invention and is not limiting in any way. A notch is shown which runs together with and on the platform 1 and which is rotatably supported on an axis and through which a cable 5 is guided. The cable 5 is, as already mentioned, angled in the form of an “S” and guided over the rollers 8 and 9 (see Fig. 2 and 3). In the locked position the cable 5 is elongated and the weight of the notch results in a turning moment of the notch around the rotational axis 10 in such a way that a tooth designed on the notch engages in the gear rack which is provided on the guide 2 designed as a column. The notch is disengaged in such that the opening element 7 designed as an electromagnet shortens the active length of the cable 5. By means of that the notch moves around the rotational axis so that the tooth of the notch is released from the gear rack. Now the platform 1 can be shifted against the guide 2. If the actuating element, which is not shown, is released again for the opening element 7 the active length of the cable 5 is lengthened again and the notch falls back again into the locking position because of the gravity. Such a passive safety design is very smart. It is ~~characterised~~ characterized by the fact that the notch is always locked if not impinged, that is independently passive. This safety device in the form of a dead man’s circuit has an especially great importance in particular for devices for storing vehicles because very high demands are made on these devices concerning the safety.

Please replace the paragraphs beginning at page 17, line 1 through page 17, line 13 with the following rewritten paragraphs.

In the Fig. 2 and 3 the section indicated with II in ~~the~~ Fig. 1 is shown. In Fig. 2 the locking unit 3 designed as a notch can be seen. The guide of the cable 5 over the two deflection rollers 8 and 9 is in clear evidence. A tooth designed on the notch engages into the locking element 6 designed as a gear rack.

In Fig. 3 the same section can be seen, however, the cable 5 is in the shortened position so that the notch is in the released position by means of the force introduced into the locking unit 3 which acts against ~~the~~ gravity. By the way, the reference numbers have been explained already so that a new presentation is not necessary.

Please replace the paragraph beginning at page 18, line 23 through page 18, line 33 with the following rewritten paragraph.

In an advantageous development of the device according to the invention it is provided that ~~the~~ safety is ~~realised~~ realized through the traverse path of the platform 1 by magnetic means. For example, the guide 2 can be designed as a contrapole of an electromagnet which is arranged on the platform 1. When the electromagnet is actuated the magnetic force actuated by that is sufficient to hold the platform 1 in this position. It is, of course, possible to combine this

magnetic safety with mechanic safety means. Conveniently such a device is also provided on both sides of the platform 1 and thus on both guides 2.